

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended): An apparatus comprising:

 a substrate;

 a ground plane on the substrate, the ground plane having a slot;

 transmission lines lying over the slot; and

 data processing agents each connected to one of the transmission lines configured such that a first data processing agent sources a current onto a first transmission line connected to the first data processing agent, inducing a transient return current on the ground plane, propagating energy of the transient return current to the slot, inducing a transient voltage pulse onto a second transmission line connected to a second data processing agent when the propagating energy encounters the second transmission line, and generating a binary digital signal in the second data processing agent from the transient voltage pulse received on the second transmission line.

2. (Original): The apparatus of claim 1 in which the slot is terminated.

3. (Original): The apparatus of claim 1 in which the transmission lines are terminated.

4. (Original): The apparatus of claim 1 in which the slot functions as a main bus trunk when excited.

5. (Original): The apparatus of claim 1 in which the data processing agents comprise processors.

6. (Original): The apparatus of claim 1 in which the data processing agents comprise chipsets.

7. (Original): The apparatus of claim 1 in which the transmission lines lie perpendicular to the slot.

8. (Original): The apparatus of claim 1 in which the data processing agents comprise signaling circuitry.

9. (Original): A method comprising:

inducing a transient return current on a reference plane in response to a driving agent sourcing a current onto a first transmission line, the current being representative of binary data; propagating energy of the transient return current to a slot in the reference plane; inducing a transient voltage pulse onto a second transmission line connected to a receiving agent when the propagating energy encounters the second transmission line; and generating a binary digital signal in the receiving agent from the transient voltage pulse received on the second transmission line.

10. (Canceled)

11. (Currently Amended): ~~The A method of claim 10 further comprising:~~

in a bus, sourcing a current being representative of binary data on to a first line;
inducing a return current on a reference plane;
transferring energy of the return current to a slot in the reference plane;
inducing a voltage pulse on to a second transmission line from the energy in the slot; and generating a binary digital signal in a receiving agent from the voltage pulse.

12. (Canceled)

13. (Canceled)

14. (Original): The method of claim 11 in which the receiving agent is a processor.

15. (Currently Amended): An apparatus comprising:

a substrate;
a ground plane on the substrate, the ground plane having a slot;
parallel arranged transmission lines lying over the slot; and
data processing agents each connected to one of the parallel arranged transmission lines
configured such that a first data processing agent sources a current onto a first transmission line
connected to the first data processing agent, inducing a transient return current on the ground
plane, propagating energy of the transient return current to the slot, inducing a transient voltage
pulse onto a second transmission line connected to a second data processing agent when the
propagating energy encounters the second transmission line, and generating a binary digital
signal in the second data processing agent from the transient voltage pulse received on the
second transmission line.

16. (Original): The apparatus of claim 15 in which the slot is terminated.

17. (Original): The apparatus of claim 15 in which the parallel transmission lines are terminated.

18. (Original): The apparatus of claim 15 in which the slot functions as a main bus trunk when
excited.

19. (Original): The apparatus of claim 15 in which the data processing agents comprise
processors.

20. (Original): The apparatus of claim 15 in which the data processing agents comprise chipsets.

21. (Original): The apparatus of claim 15 in which the data processing agents comprise signaling
circuitry.